

CLAIMS

1. An isolated DNA encoding a fusion protein comprising (a) a first amino acid sequence comprising amino acid 42 to amino acid 60 of SEQ ID NO:2, and (b) a second amino acid sequence derived from the sequence of a protein other than P-selectin ligand.
2. The DNA of claim 1 which further comprises an expression control sequence operably linked to said nucleotide sequence.
3. A host cell transformed with the DNA of claim 2.
4. A process for producing a fusion protein, which comprises:
 - (a) culturing the host cell of claim 3 under condition suitable for expression of the fusion protein; and
 - (b) purifying the fusion protein from the culture medium.
5. The DNA of claim 1 wherein said first amino acid sequence comprises amino acid 42 to amino acid 402 of SEQ ID NO:2.
6. The DNA of claim 1 wherein said first amino acid sequence comprises amino acid 42 to amino acid 310 of SEQ ID NO:2.
7. The DNA of claim 1 wherein said first amino acid sequence comprises amino acid 42 to amino acid 88 of SEQ ID NO:2.
8. The DNA of claim 1 wherein said first amino acid sequence comprises amino acid 42 to amino acid 118 of SEQ ID NO:2.
9. The DNA of claim 1 wherein said first amino acid sequence comprises amino acid 42 to amino acid 189 of SEQ ID NO:2.

10. The DNA of claim 1 wherein said second amino acid sequence is linked to the C-terminus of said first amino acid sequence.

11. The DNA of claim 10 wherein said sequences are linked by a linking sequence.

12. The DNA of claim 1 wherein said second amino acid sequence is joined to the N-terminus of said first amino acid sequence.

13. The DNA of claim 12 wherein said sequences are linked by a linking sequence.

14. The DNA of claim 1 wherein said second amino acid sequence is derived from a protein selected from the group consisting of an antibody, a cytokine, a growth factor, a differentiation factor, a hormone, an enzyme, a receptor or fragment thereof and a ligand.

15. The DNA of claim 14 wherein said second amino acid sequence is derived from the sequence of an antibody.

16. The DNA of claim 15 wherein said second amino acid sequence is derived from the Fc portion of an antibody.

17. The DNA of claim 15 wherein said second amino acid sequence is a mutation of a sequence derived from an antibody.

18. The DNA of claim 14 wherein said second amino acid sequence is derived from the sequence of a cytokine.

19. The DNA of claim 14 wherein said second amino acid sequence is derived from the sequence of a growth factor.

20. The DNA of claim 19 wherein said growth factor is a BMP.

21. The DNA of claim 7 comprising the nucleotide sequence of SEQ ID NO:35 from nucleotide 123 to nucleotide 939.

22. The DNA of claim 21 comprising the nucleotide sequence of SEQ ID NO:35.
23. The DNA of claim 7 comprising the nucleotide sequence of SEQ ID NO:37 from nucleotide 123 to nucleotide 807.
24. The DNA of claim 23 comprising the nucleotide sequence of SEQ ID NO:37.
25. The DNA of claim 7 comprising the nucleotide sequence of SEQ ID NO:39 from nucleotide 123 to nucleotide 1311.
26. The DNA of claim 25 comprising the nucleotide sequence of SEQ ID NO:39.
27. The DNA of claim 7 comprising the nucleotide sequence of SEQ ID NO:41 from nucleotide 123 to nucleotide 792.
28. The DNA of claim 27 comprising the nucleotide sequence of SEQ ID NO:41.
29. A fusion protein comprising (a) a first amino acid sequence comprising amino acid 42 to amino acid 60 of SEQ ID NO:2, and (b) a second amino acid sequence derived from the sequence of a protein other than P-selectin ligand.
30. The fusion protein of claim 29 wherein said first amino acid sequence comprises amino acid 42 to amino acid 402 of SEQ ID NO:2.
31. The fusion protein of claim 29 wherein said first amino acid sequence comprises amino acid 42 to amino acid 310 of SEQ ID NO:2.
32. The fusion protein of claim 29 wherein said first amino acid sequence comprises amino acid 42 to amino acid 88 of SEQ ID NO:2.
33. The fusion protein of claim 29 wherein said first amino acid sequence comprises amino acid 42 to amino acid 118 of SEQ ID NO:2.

34. The fusion protein of claim 29 wherein said first amino acid sequence comprises amino acid 42 to amino acid 189 of SEQ ID NO:2.

35. The fusion protein of claim 29 wherein said second amino acid sequence is linked to the C-terminus of said first amino acid sequence.

36. The fusion protein of claim 35 wherein said sequences are linked by a linking sequence.

37. The fusion protein of claim 29 wherein said second amino acid sequence is joined to the N-terminus of said first amino acid sequence.

38. The fusion protein of claim 37 wherein said sequences are linked by a linking sequence.

39. The fusion protein of claim 29 wherein said second amino acid sequence is derived from a protein selected from the group consisting of an antibody, a cytokine, a growth factor, a differentiation factor, a hormone, an enzyme, a receptor or fragment thereof and a ligand.

40. The fusion protein of claim 39 wherein said second amino acid sequence is derived from the sequence of an antibody.

41. The fusion protein of claim 40 wherein said second amino acid sequence is derived from the Fc portion of an antibody.

42. The fusion protein of claim 40 wherein said second amino acid sequence is a mutation of a sequence derived from an antibody.

43. The fusion protein of claim 39 wherein said second amino acid sequence is derived from the sequence of a cytokine.

44. The fusion protein of claim 39 wherein said second amino acid sequence is derived from the sequence of a growth factor.

45. The fusion protein of claim 44 wherein said growth factor is a BMP.

46. The fusion protein of claim 32 comprising the amino acid sequence of SEQ ID NO:36 from amino acid 42 to amino acid 313.

47. The fusion protein of claim 46 comprising the amino acid sequence of SEQ ID NO:36.

48. The fusion protein of claim 32 comprising the amino acid sequence of SEQ ID NO:38 from amino acid 42 to amino acid 269.

49. The fusion protein of claim 48 comprising the amino acid sequence of SEQ ID NO:38.

50. The fusion protein of claim 32 comprising the amino acid sequence of SEQ ID NO:40 from amino acid 42 to amino acid 437.

51. The fusion protein of claim 50 comprising the amino acid sequence of SEQ ID NO:40.

52. The fusion protein of claim 32 comprising the amino acid sequence of SEQ ID NO:42 from amino acid 42 to amino acid 264.

53. The fusion protein of claim 52 comprising the amino acid sequence of SEQ ID NO:42.

54. A fusion protein made according to the process of claim 4.

55. A composition comprising (a) a first peptide comprising amino acid 42 to amino acid 60 of SEQ ID NO:2, and (b) a second peptide derived from the sequence of a protein other than P-selectin ligand, wherein said first peptide and said second peptide are chemically linked by a moiety other than a peptide bond.

55. A composition comprising (a) a first peptide comprising amino acid 42 to amino acid 60 of SEQ ID NO:2, and (b) a second peptide derived from the sequence of a protein other than P-selectin ligand, wherein said first peptide and said second peptide are chemically linked by a moiety other than a peptide bond.